
Chief
of Engineers
**Design and
Environmental
Awards
Program
1978**

Department of the Army Office of the Chief of Engineers, Washington, D.C. 20314



foreword

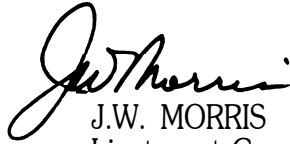
This is the 13th year that the U.S. Army corps of Engineers has presented awards for excellence in design. The Corps awards program started with architecture the first year. Engineering was added the second year and landscaping was included in the third year. A new environmental category was added in this year's program.

In the past we have both given and received environmental awards, but never as a part of our design awards program. We think that this addition will be very beneficial

These winners were selected by four panels of independent design professionals whose own work has received both national and international acclaim.

I take deep pride in heading a traditional and institutional organization like the Corps of Engineers, pride in that I made my career the Army Engineers, and pride in being part of an engineering organization which has long set engineering and architectural standards for much of the world

As you review the projects on the following pages, projects that are truly representative of the quality of the work we do, I believe that you will agree with me that my pride is justified



J.W. MORRIS
Lieutenant General, USA
Chief of Engineers



acknowledgements

We wish to express our appreciation to the officers, fellows, and members of the American Institute of Architects (AIA), the American Society of Civil Engineers (ASCE), the American Society of Landscape Architects (ASLA), and the American Consulting Engineers Council (ACEC), and to the other distinguished professionals who unselfishly contributed their expertise and support to make this years competition an outstanding success.

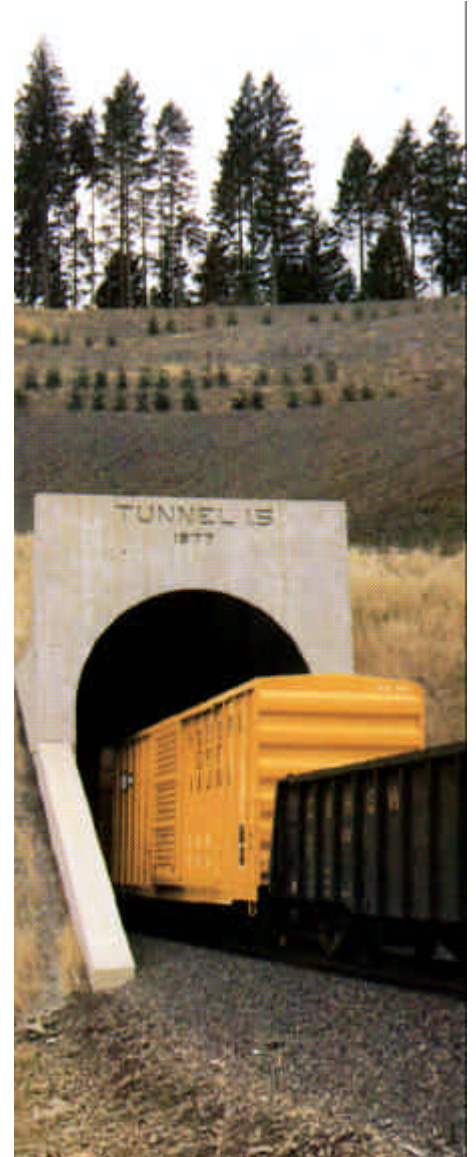
the program

In 1965 the Chief of Engineers Distinguished Design Awards Program was started to recognize excellence in three categories: Architecture, Engineering, and Landscape Architecture. This year a fourth category Environment has been added. This award recognizes excellence in design and environmental achievement related to structures completed or areas developed by the Corps and their consulting firms worldwide during 1978. To achieve equity in the selection of projects, each entry is judged on the bases of fulfillment of its own requirements and the solution to its own particular problems.

Awards of Merit are made for the best designs submitted and at the jury's discretion, an Honor Award to recognize exceptional achievement may be given. The competition is open to both Civil Works and Mili-

tary Construction projects, regardless of the agency for whom the work was done

The objective of the program is to encourage creative design quality that is functional, economical, attractive and in harmony with the environment



1978 DISTINGUISHED DESIGN AND ENVIRONMENTAL AWARDS

architecture

Honor Award

Officers Club and Sports Complex
Riyadh, Saudi Arabia

Award of Merit

NCO Open Mess
Ft. Carson, Colorado

Saylorville Lake — Visitors Center
Des Moines River, Johnston, Iowa

Chapel
Ft. Hunter Liggett, Jolon, California

Honorable Mention

Rehabilitation of Pinwheel Barracks
Hunter Army Air Field Georgia

engineering

Award of Merit

Solar Application, Two Battalion
Headquarters and Classroom
Building

Fort Hood, Bell County, Texas

Kern River — California Aqueduct
Intertie

Kern County, California

Honorable Mention

Ice Engineering Facility
Hanover, Grafton County,
New Hampshire

Laurel Powerhouse and Dam
Laurel and Whitley Counties,
Kentucky

Bonneville Second Powerhouse
Railroad Tunnel
Skamania County, Washington

Lakeview Park Beach Erosion
Control Project
Lorain, Ohio

landscape architecture

Honor Award

Santa Fe Dam Recreational Area
Los Angeles County, California

Award of Merit

South Marcum Recreation Area
Rend Lake, Benton, Illinois

Cadron Settlement Park
Faulker County, Arkansas

McGregor Park
Lost Creek Lake, Trail, Oregon

Honorable Mention

Chestnut Swimming Beach
Shenango Dam Sharpsville,
Pennsylvania

Campground and Day Use Area
Lake Sidney Lanier, Buford and
Gwinnett County, Georgia

Big Stone-Whetstone Project
National Wildlife Refuge,
Ortonville, Minnesota

environmental

Honor Award

Lost Creek Quarry
Trail, Jackson County, Oregon

Award of Merit

Slow Infiltration Land Treatment
System

Deer Creek Lake, Ohio

Camp Campfield Ecological Study
Area

Lake Shelbyville, Illinois

O.C. Fisher Wildlife Management
Area

San Angelo, Tom Green County,
Texas

Honorable Mention

Muddy Bayou Drainage Project
Saline Wildlife Management Area,
Calahoula Parish, Red River
Backwater Area, Louisiana

David Crabill House Restoration
Clark County Historical Society,
Ohio

Sacramento River Bank Protection
Project

Butte, Coluss, Glenn, Sacramento,
Solano, Sutter and Yolo Counties,
California

architectural jurors



Ehrman B. Mitchell, Jr.
Panel Chairman

Ehrman B. Mitchell, Jr. is President of the American Institute of Architects. He is a partner in charge of overall operations in the firm of Mitchell, Giurgola Architects, Philadelphia and New York. After receiving his Bachelor of Arts and Sciences degree, Mr. Mitchell graduated summa cum laude as a Bachelor of Architecture from the University of Pennsylvania in 1948. In 1947, he was awarded the Emerson Architectural Prize and the following year he received the University's Faculty Medal in Architecture. Mr. Mitchell's national AIA activities have covered a broad spectrum. As a member of the National Board of Directors of the Institute (1973 - 1977), he served on the Commission on Practice and Design, and the Advisory Committee on Post-Occupancy Evaluation. He has chaired AIA Research Workshops and the Political Contributions Task Force, and the Commission on Institute and Component Affairs.

Prior to his election as President of the AIA, he served as Vice President and First Vice President. He was elected to the Institute's College of Fellows in 1969. As a member of the Philadelphia Chapter of the AIA, Mr. Mitchell has served as a member of the Philadelphia Construction Council, as chairperson of the Joint AIA-Associated General Contractors Committee, and as a director of the chapter. On the state level, he has served as director, secretary, Vice President, and President of the Pennsylvania Society of Architects. Prior to establishing his own firm, Mr. Mitchell was the principal in charge of the London office of Bellante and Clauss, Architects and Engineers.



Jerome M. Cooper

Mr. Cooper is a fellow of the American Institute of Architects. In addition, he is a member of the Urban Land Institute and the International Council of Shopping Centers. He is President of Cooper, Carry & Associates, Inc, Atlanta Ga. After graduating from the Georgia Institute of Technology in 1952, Mr. Cooper served as Lt (JG) in the U.S. Navy for two years. Upon his return, he completed his fifth year in the School of Architecture at the Georgia Institute of Technology. In 1955 he received a Bachelor of Architecture and was awarded the A.I.A Student Medal for Excellence In 1956 he was awarded a Fulbright Fellowship for a year's study at the University of Rome, Rome, Italy. Mr. Cooper has served as a member of the National Board of Directors of the American Institute of Architects, the Board of Directors of the Georgia Association A.I.A., and as President of the Atlanta Chapter of the A.I.A. He has also served as Chairman of

the Commission of Institute and Component Affairs at the national level, Chairman of the Governmental Action Committee for the Georgia Association A.I.A., Chairman of the Citizens Advisory Board for Urban Development for the city of Atlanta Ga., and as President of the Foundation of Georgia



John F. Hartray, Jr.

Prior to joining Booth Nagle & Hartray in January, 1977 John Hartray was associated with the Chicago offices of Skidmore, Owings & Merrill; Holabird, Root & Burgee; Naess & Murphy; and Harry Weese & Associates. He received a Bachelor of Architecture from Cornell University in 1954. Mr. Hartray is a member of the American Institute of Architects where he served in such

positions as Director, Chicago Chapter, Chairman, National Committee on Architecture for the arts and recreation; member, National Board of Directors representing the Illinois region; and Chairman National Commission of Environment and Design. In addition, Mr. Hartray belongs to the Lambda Alpha International Fraternity of Land Economists, American Society of Architectural Historians, and the National Architectural Accrediting Board With Norman Johnson he coauthored A Plan to Save and Improve Chicago's Central Library, Inland Architect and the WFMT Guide. He is the author of How Development Rights Transfer Works. Mr. Hartray has been a visiting critic at the University of Illinois, Ohio State University, Chicago School of Architecture Foundation, and Illinois Institute of Technology.

Honor Award

Officers Club and Sports Complex

Riyadh, Saudi Arabia

Design by: Brown, Daltas and Associates, Rome, Italy

Design Supervision by: Middle East Division (Rear)

Jurors Comments:

An excellent example of a building complex designed to reflect the environment, the program, and historical forms indigenous to the culture of Saudi Arabia. The repetition of the domed form provides continuity throughout. Detailing lighting and furnishings have been integrated into the structure with great care. The site plan creates an ordered sense of place in a harsh landscape while avoiding any overwhelming sense of formality.

Located prominently on the main entry to the capitol of Saudi Arabia, this complex is built to serve the recreation and club requirements of Riyadh officers and the diplomatic community. The complex includes a reception hall, banquet facilities, lecture hall for 500, and suitable living accommodations for bachelor officers and VIP guests. Athletic facilities include a stadium for 2000, tennis, volleyball and basketball courts and an Olympic swimming pool. The main building is formed around a landscaped courtyard with pools and fountains, which is entered on a ceremonial axis, typical of traditional Islamic architecture. A rhythmic pattern of primary shapes is created by a series of elliptical domes, a structure which is sympathetic to forms used in Islamic architecture, yet combines the virtues of modern thin shell construction and monolithic finishes. Areas are well defined by the use of three sizes of domes, giving a definite hierarchy of spaces visible from both the inside and outside. Architectural continuity is maintained with specially designed ceramic murals, chandeliers, sculptural fountains and aluminum screens which faithfully recall the simplicity and elegance of ancient Islam.





architecture

Award of Merit

NCO Open Mess

Fort Carson, Colorado

Springs, Colorado

Design by: Clifford S

Nakata, and Asso-

ciates, PC., Colorado

Springs, Colorado

Design Supervision by:

Omaha District



Jurors Comments:

This building has vitality and exuberance that are appropriate to its use. A diversity of planes, openings, and shapes are disciplined into the whole, giving a clarity to the design. The plan is well-articulated, and the use of materials and the quality of detailing are consistent throughout. A spirited, good humored design

This is a 21,950 square foot facility on one level, consisting of a ballroom formal cocktail lounge, dining room kitchen, partyroom, stag bar complex and administrative area for club managers, clerks and cashiers, with all required support facilities. Total occupant load is under 1,000. A 297-vehicle parking facility is split attractively on two levels, and employee stalls are convenient north of the building. A primary feature of the design is high efficiency. All extraneous corridors have been carefully eliminated meaning more usable space for the building funds. The public entry of the building leads directly to a main lobby

around which the extremely efficiently grouped major spaces are organized. Energy efficiency is very good. The building site is on a rather high knoll centrally located on post Beautiful and honored views of the Rocky Mountains exist to the west. The long north-south axis of the facility orients all priority public spaces to the mountain view. The dock-service area is visually screened by a wall surrounding the outside patio. Approximately half of the parking is effectively screened from the major front view of the building by careful grade changes and landscaping.



Award of Merit

**Saylorville Lake Visitors
Center**

Johnston, Iowa

**Design by: Parkhurst-
Appier-Marlof Asso-
ciates, Rock Island,
Illinois**

**Design Supervision by:
Omaha District**

Jurors Comments:

"The building is handsomely sited overlooking the lake. The clean, simple structure derived from the shelter of the roof, is appropriate to the site and functions. The division of uses into two floors is functional and reflects a logical use of a sloping site. Detailing and use of materials are commended



The Visitor Center has a three-fold function, a public meeting and display area, an overlook of the dam and lake, and administrative areas for the lake manager and his staff. An observation deck around the perimeter of the building serves as an overlook and entrance to the building. It provides a panoramic view of the dam and lake. Natural topographic features are coordinated with the siting to achieve aesthetic harmony. A minimum disturbance of the existing landscape was accomplished by selective clearing and the use of retaining walls that blend into the design of the building. The building has two levels. All public facilities are located on the upper level and are easily accessible by the physically handicapped. This area is for public meetings and for the display and presentation of exhibits relative to the overall dam and lake project. The lake manager's office is located next to the public area to provide contact with the public and visiting officials. A receptionist is available to answer questions and to give out information concerning the project.



Award of Merit

Chapel

**Fort Hunter-Liggett,
Jolon, California**

**Design by: Belli, Fox
& Kuska, Salinas,
California**

**Design Supervision by:
Sacramento District**

Jurors Comments:

"The design is a formal recognition of the regional tradition, done with simplicity and restraint. The building has pleasing shapes and forms that shade and give purpose to the

worship area The introduction of light is well controlled and adds a sense of dignity to the composition The plan is straight-forward and without affectation



This Chapel is situated on top of a knoll that overlooks the central section of the post The main road from the entrance gate passes through this area, offering a view of the chapel from three sides. This high exposure requires that the chapel demonstrate a successful application of the post's architectural theme: Spanish Mission The chapel also balances the presence of a large cross standing on the other side of the valley. A number of ele-

ments have been used to establish the Spanish Mission style of the chapel. Textured white stucco emulates the masonry character of adobe; arched openings and rough timber represent the old construction methods; clay roofing tile provides a direct link to the past; curved blank walls hint at the protection afforded by walled courtyards; cathedral ceiling and clerestory add a rural image that fits in with the farm economy of California

missions. Variations on these elements complete the design of this chapel Open porticos and a trellis control sunlight while giving depth to the elevations, tall stained glass windows provide visual relief to the angular end walls, circular openings crown the modern bell tower. Both interior and exterior materials and finishes were selected to maintain the mission heritage at the post



Honorable Mention

Rehabilitation of
Pinwheel Barracks
Hunter Army Air Field,
Georgia

Design by: Helfrich,
Grantham and Helfrich
Savannah, Georgia

Design Supervision by:
Savannah District

Jurors Comments:

"The solution is commended for the clever use of the existing structure in transforming the old building into a more efficient and pleasant living environment for the soldier. The resulting architectural character could have been handled with more sensitivity."







Walter E. Blessey Panel Chairman

Walter E. Blessey is the President of the American Society of Civil Engineers. He has been head of the civil engineering department at Tulane University in New Orleans since 1959. Professor Blessey has successfully combined two careers. At the time of his graduation from Tulane University in 1943, with a MS. degree in civil engineering, he became assistant city engineer for the city of New Orleans. At the same time he was also named visiting instructor in civil engineering at his alma mater. He left these posts to serve as a commissioned officer in the U.S. Navy Reserve and served in Okinawa for three years. In 1946 he resumed his academic career at Tulane as an associate professor of bridge, structural and foundation engineering. He became a full professor in 1956 and head of civil engineering department in 1959. As a consultant, Prof. Blessey has concentrated on the design of off shore drilling and

marine structures, industrial plants, heavy foundations and bridges. His long service to ASCE began during student days when he served as president of the Tulane Student Center. Since that time, he has held office as Louisiana Section President, District 14 Council President and National Director. He is a member of a number of professional committees; among them the publication committee, the ASCE Committee on Foundations and Excavations and the ASCE-IABSE Joint Committee on Tall Buildings. In 1969, he was the general chairman of ASCE's national convention on water resources engineering. He is the author of a number of technical articles published in engineering journals. In 1975 he was awarded the James M Todd Technological Accomplishment by the Louisiana Engineering Society. He is a member of the American Concrete Institute, Prestressed Concrete Institute and the American Society for Engineering Education.



R. Duane Monical

R. Duane Monical is President of Monical Associates, Inc. of Indianapolis, Indiana. This firm specializes in highway and bridge design, structural design for architects, special industrial projects and civil engineering projects. Mr. Monical is a registered professional engineer in Indiana and 13 other states and a registered land surveyor in Indiana. He holds degrees in Bachelor of Science in Civil Engineering and Master of Science in Civil Engineering from Purdue University. From 1943 - 1946 he served with the U.S. Navy and was a member of the U.S. Army Reserve from 1948 - 1953. Mr. Monical is President of the American Consulting Engineers Council. He is also a member of the National Society of Professional Engineers, American Arbitration Association, Tau Beta Pi (Life Member), Purdue University Alumni Association, and the Board of Directors, Construction Specifications Institute. Mr. Monical is a Fellow of the American Society

of Civil Engineers. He is a past chairman of the Indiana Board of Registration for Engineers and Land Surveyors. Mr. Monical is very active in the American Consulting Engineers Council serving in such positions as; President, Consulting Engineers of Indiana, 1969, National Director to CEC, 1966 - 1971, Member, CEC Policy and Resolution Review Committee, 1968 - 1969, Member, CEC Bylaws and Resolutions Committee, 1969 - 1971 and Vice President, CEC, 1971 - 1973.



John W. Hill

Since 1967, John W. Hill has been a Professor of Architecture and Dean of the School of Architecture at the University of Maryland. Dean Hill received a Bachelor of Arts degree in 1951 and a Bachelor of Architecture degree in 1952. Both of these degrees were from Rice Institute. In 1959 he received a Master of Architecture degree from the University of Pennsylvania. Dean Hill served as a Lieutenant with the U.S. Navy in 1952 - 1955 and was a member of the Naval Reserve from 1955 - 1965. He was a partner in the firm of Groves-Hill and Associates from 1964 - 1967. A registered architect in Maryland, Dean Hill is a member of the National Council Architectural Registration Board. Mr. Hill is also a member of the professional advisory board, the Governors Advisory Board of Historical Preservation, and the Design Advisory Panel, Department of Housing and Community Development, Baltimore.

Award of Merit

**Solar Application, Two
Battalion Headquarters
and Classroom Building**

**Design by: General
Electric Company,
Philadelphia, Penn-
sylvania
Design Supervision by:
Fort Worth District**

Jurors' Comments:

This project represents a significant step from conceptual design to wide-spread application. The system which provides almost 90 percent of the total building heating and cooling needs is the first system of its kind on an Army Post."

The first solar energy system of its kind installed on an Army building is working well at Fort Hood near Killeen, Texas. Solar power provides almost all of the building's heating and cooling needs. Developed in cooperation with the Department of Energy, this system is part of a large experimental program for using solar technologies in military construction. Future use of solar energy could represent substantial energy savings up to \$2 million on Fort Hood's annual electric bill. The experimental research at Fort Hood could result in future widespread industrial use of solar energy throughout the nation. Test data from this project will be used to establish design criteria and standards for future installations. The battalion headquarters and classroom facility is part of a 1650 man enlisted barracks complex. The one-story masonry building is sited with its long axis perpendicular to magnetic North. Unobstrusive, roof-mounted solar panels enhance the building's overall appearance. An ethylene glycol solution circulates through the collector and heat exchanger. Water is used as a storage medium and for heat transfer through the other system loops. Hot water is stored underground, chilled aboveground. A mechanical room extension houses the additional equipment and a visitor observation room.





Award of Merit

**Kern River - California
Aqueduct Intertie
Kern County, California
Design by: Sacramento
District**



Jurors Comments:

"This Project has a number of important engineering features such as an above grade canal crossing, slow flow sedimentation basin, and an emergency bypass channel. A unique feature of the bypass channel is the soil cement protected downstream slope, which proved to be an economical and more aesthetic alternate to rock protection"

During high runoff years snowmelt is taken by the Kern River down to the San Joaquin Valley. Flooding in past years has caused millions of dollars in losses to agricultural crops in some of the most productive land in California. The Kern River-California Aqueduct Inter-tie was constructed to prevent much of this flooding by diverting flood water into the adjacent California Aqueduct. The Aqueduct then trans-

ports the water south to Los Angeles to be used for beneficial uses. This project has proved to be more successful than originally conceived. Not only did it prevent some \$5 million in damages during its first year of operation, over four times the cost, but it is also being put to another beneficial use. The sedimentation basin was used to recharge groundwater depleted during the 1976-77 drought in California.

Annual use of the project can now be made instead of the original projection of about once every twelve years. In addition to safely disposing of Kern River floodwater, the project makes it possible to dispose of floodwater from other streams in the San Joaquin Valley. This is done by conveying from such streams to the Kern River by existing irrigation canals and by coordinated operation of the California Aqueduct.





Honorable Mention

Ice Engineering Facility
Hanover, Grafton Co.,
New Hampshire

Design by: Hood Industries Research & Engineering, Inc., New London, Connecticut

Design Supervised by:
New England Division

Jurors Comments:

An outstanding aspect of this project is the recognition by the Corps of Engineers that important research is needed in the cold regions. Good solutions to the unusual design requirements necessitated by a very large cold-room, and separate rooms for a recirculating flume and a test basin pool have been provided



Honorable Mention

Laurel Powerhouse
and Dam

Laurel and Whitley
Counties, Kentucky

Designed by: Nashville
District

Jurors Comments:

"By utilizing a common power and diversion tunnel, and by leaving the spillway and power discharge channels in their natural configuration an excellent integration of this facility into the terrain and landscape is achieved. Sensible design and good replanting make a positive contribution to the environment."



Honorable Mention

**Bonneville Second
Powerhouse Railroad
Tunnel**

**Skamania County,
Washington**

**Designed by: Portland
District**

Jurors Comments:

This project was selected for recognition because important engineering and construction techniques were utilized to construct a tunnel through very poor subsurface conditions. In addition to minimizing environmental damage the tunnel was completed on a very tight time schedule and under the estimated construction cost



Honorable Mention

Lakeview Park Beach
Erosion Control
Project

Lorain, Ohio
Design by: Buffalo
District

Jurors' Comments:

"The use of parallel detached breakwaters to achieve a stable beach condition may challenge traditional beach erosion control design techniques. Essentially, the parallel breakwaters lessen the destructive energy of the lakes wave action, while taking advantage of that lesser wave energy to maintain a sand beach



landscape architecture jurors



William A. Behnke

A native of Cleveland Ohio, William A. Behnke served with the U.S. Navy in all theaters of war during World War II. Part of his active duty service was with the Norwegian government in exile. He received his B.L.A. from the College of Engineering, Ohio State University, in 1951. His first employment was with Grier Riemer. In 1956 he began his own practice. He was associated with the Charles L. Knight office, 1957-1958. The partnership of Behnke, Suzunyog & Ness was formed in 1958, later changed to Behnke, Ness & Litter-r. He formed the firm of William A. Behnke in 1970 and the firm has won numerous national awards for design excellence. Joining ASLA in 1951, he became a Member in 1956

and a Fellow in 1975. He has served two consecutive terms as President of the former Kentucky-Ohio Chapter during which the Chapter won the first President's Cup as well as a grant from the Ohio Arts Council to produce The Guide to Landscape Architecture in Ohio. Mr. Behnke has served the State of Ohio as a member of now Senator Glenn's Citizens Task Force for the Protection of the Environment and as Vice Chairman, Board of Unreclaimed Strip Mines. He also served on the Ohio Board of Landscape Examiners as President and Secretary of the Board. He was elected Distinguished Alumni of the College of Engineering, Ohio State University, in 1978. Bill has been listed in Who's Who in America 40th Edition.



Jot D. Carpenter

Jot D. Carpenter is the President of the American Society of Landscape Architects. Professor Carpenter is Chairman of the Department of Landscape Architecture in the College of Engineering at the Ohio State University. Before becoming President of ASLA Mr. Carpenter had served in such national offices as Vice-President and Secretary-Treasurer while serving on the ASLA Board of Trustees for seven years. He has also served as a member of the National Uniform Examination Committee of the Council of Landscape Architectural Registration Boards and as chairman of the ASLA Task Force on Entry Level Competence. Professor Carpenter has been responsible for providing the leadership which has brought the

Department of Landscape Architecture at The Ohio State University from among the smallest in the country to one of the five largest undergraduate accredited programs in the world. He has also been the editor for the major professional reference manual, *The Handbook of Landscape Architectural Construction*. His other scholarly works are

Land Reborn: A Study of Unreclaimed Strip Mined Lands in Ohio, *The Columbus River Study*, *The Streets of Upper Arlington: A Study of Urban Forests* and the design of the Ohio Avenue and Westside Day Care Centers in Columbus. Professor Carpenter has been active in community affairs as a member and President of the Ohio Board of Landscape Architect Examiners, a Fellow of the Academy of Contemporary Problems, a member of the Upper Arlington Planning Commission and as a judge in the Columbus Convention and Visitors Bureau Urban Beautification Awards Program. In addition, he serves as a resource speaker and writer for the Ohio Cooperative Extension Service and the Garden Clubs of Ohio. Professor Carpenter received his Bachelor of Landscape Architecture Degree from the University of Georgia in 1960 and a Master of Landscape Architecture degree from the Harvard Graduate School of Design in 1962. Prior to joining the faculty of The Ohio State University in 1971, he taught at Cornell University and worked for the Landscape Architectural firm of T.J. Wirth Associates in Billings, Montana.



Donald H. Parker
Panel Chairman

Mr. Parker has been in private landscape architectural practice since his graduation from the University of Massachusetts in 1947, from which he holds degrees of Bachelor of Science and Bachelor of Landscape Architecture. He was employed until 1949 in Boston and New York in contemporary landscape design work. Mr. Parker then accepted a position with The Colonial Williamsburg Foundation in preservation work. He has been Director of Landscape Architecture for that organization since 1960. He is the author of many articles on historic site preservation and plant materials and is a frequent lecturer. Mr. Parker also conducts a limited independent design practice, principally in historic

site preservation throughout the mid-South. During World War II he was a Second Lieutenant in the Army Cavalry. Joining the American Society of Landscape Architects and its Potomac Chapter in 1953, Mr. Parker's contributions have been wide and varied. Mr. Parker served as Potomac Trustee on the ASLA Board of Trustees until this fall, when a new Virginia Chapter, ASLA was formed, for which he now serves as Trustee. He was elected a Society Fellow in 1970 and serves as chairman of its Committee for the Preservation of the F.L. Olmsted Home & Office, Brookline, Mass. Mr. Parker is also a member of the Landscape Architects of Virginia, Inc., and has served as charter Vice President (1974-1976) and Director (1974-1978). He is an active member of the following organizations: American Horticultural Society, Landscape Chapter, Society of Architectural Historians, Garden History Society of Great Britain and Association for the Preservation of Virginia Antiquities.

landscape architecture

Honor Award

**Santa Fe Dam
Recreational Area
Los Angeles County,
California**

**Design by: Moffatt and
Nichol Engineers, Los
Angeles, California
Design Supervised by:
Los Angeles District**

Jurors Comments:

A tremendous concept Seems well thought out, good use of areas with concern for integrity and protection of different uses/areas Substantial improvement of area through project. Effective use of rock (pebble/ boulder) from site which relates very well

The Santa Fe Dam recreational Area provides optimum use of an otherwise dry flood control reservoir by integrating plant and wildlife preservation, recreation, flood control, and water conservation. Without impairing the flood control operation of the reservoir, the Corps carefully maintained the integrity of 450 acres of diverse wildlife management area while blending it with a high-intensity recreational area. Isolation of the wildlife management area was insured by placing the lake between it and the recreational area. The adjacent lake shore was covered with riprap and planted in cactus. All recreational development and support facilities were developed across the lake on land less sensitive to biological factors. Consideration was also given to the natural topography of the site, as well as anticipated flood elevations of the reservoir to prevent frequent inundation. To avoid user interference, all roads and parking areas were designed along the perimeter of the project. Recreational areas include 35 acres of picnic area and playgrounds, the swimming beach, and the fishing facilities of the lake. When not needed for parking, the greenbelt overflow parking area can be used for field games.





architecture

Award of Merit

South Marcum
Recreation Area
Rend Lake, Benton,
Illinois

Design by: H.O.K.
Associates, Inc.,
St. Louis, Missouri
Design Supervised by:
St. Louis District



Juror s Comments:

*"Well integrated into existing woodland; scale of roads and walks excellent. Buildings nicely done
Well done amphitheatre"*

This project was developed to accommodate a demand for multi-purpose recreation adjacent to a flood control reservoir. A primary concern in the program was to minimize the intrusion of manmade elements; particularly road and building construction. This was done to maintain the natural features of the site and enhance the outdoor recreation experience. One way vehicle circulation was used for camp roads while pedestrian paths link campsites to support facilities. The amphitheater, picnic shelter and restrooms were located to take advantage of summer breezes and natural topography, thereby, limiting excessive grading and site degrada-

tion. Day use areas were designed to accommodate large groups and family outings. Group picnic shelters and individual tables allow this flexibility. Shoreline vegetation was left uncleared to provide natural erosion protection and insuring maximum aesthetic character.



architecture

landscape

Award of Merit

Cadron Settlement Park
Conway Faulkner
County, Arkansas
Design by: Little Rock
District

Cadron Settlement Park is on the site of a pre-historic Indian village and Central Arkansas first white settlement in 1808. The challenge in planning, design and construction was to preserve this historical resource while providing an additional water-oriented recreation facility. A major goal was the preservation of the native cedars, hardwood, dogwood, honeysuckle, mosses, ferns and other vegetation. The native plants were augmented by the placement of 142 redbud, holly, native rose and other varieties for sound and visual screening. Native stones, cedar shingles and exposed wooden beams blend the recreation facilities into their surroundings while reflecting the early settlers construction style. A large picnic shelter which can later be enclosed and used as an interpretive facility was constructed. A 7500-foot trail meanders lazily past an early settlers cemetery, stagecoach road, scenic river bluffs and past magnificent red cedars which have stood since the settlement's earliest days. A gracefully curved rustic bridge and a native stone footbridge spans the ravine at an old grist mill site. Special parking and a paved trail to the bluff area are provided for the physically handicapped.



Jurors Comments:

"Nice concept, handled with care and restraint. Good solution and use of materials with sensitive detailing. A pleasant experience. The use of people in photos is appreciated."



architecture

landscape

Award of Merit

McGregor Park
Lost Creek Lake, Trail,
Oregon
Design by: Portland
District



Jurors Comments:

"Sensitive design well integrated into site. Sensitive use of materials and detailing. A designer's hand is apparent. Plans are helpful and greatly appreciated"



The park was constructed in an existing wooded area. Extreme care was exercised to preserve the natural beauty of the area. The Visitor Center and trails were planned and constructed into the space without removing any of the trees. A half mile asphalt trail winds through this wooded site, along the river, and to the restrooms and the Visitor Center. Thirty paved picnic sites were developed using a special design for picnic tables, allowing the handicapped access to the table. Two fishing docks immediately

adjacent to the river allow fishing access. Drinking fountains were selected that make it more convenient for the elderly, children, and the handicapped. The entire area, including trails, walks, buildings, and picnic sites, were constructed at grade, with less than one percent slope. Since the area was carefully cleared, little landscaping or site restoration was required. Some native trees, shrubs, and lawn areas were planted, however, to supplement and enhance the existing vegetation.



architecture

landscape

Honorable Mention

Chestnut Swimming
Beach

Shenango Dam,
Sharpsville,
Pennsylvania

Design by: Pittsburgh
District



Jurors Comments:

"Immature planting difficult to evaluate except around building where solution and grouping are indelicate and inappropriate (none reflective of surrounding environment). Nice building but engineered solution to parking lot and walks

landscape architecture

Honorable Mention
Campground and Day
Use Area
Lake Sidney Lanier,
Buford and Gwinnett
County, Georgia
Design by: Mobile District



Jurors Comments:

*Architecture quite good beach
wall very attractive Apparently
well integrated into natural wood-
land. Well done. Gabion insensi-
tive Campground well integrated
with woods"*

architecture

landscape

Honorable Mention

Big Stone-Whetstone
Project

National Wildlife Refuge
Ortonville, Minnesota

Design by: St. Paul
District



Jurors Comments:

An exquisite site-successful only because the site is basically left alone. Architecture inappropriate Roads would have &en greatly improved if more curvilinear, special curves used with less tangent.



environmental jurors



Stanley I. Auerbach
Panel Chairman

Dr. Stanley I. Auerbach is the Director of the Environmental Sciences Division of the Oak Ridge National Laboratory. He received a B.S. and MS. degree in zoology, specializing in ecology, from the University of Illinois. Dr. Auerbach received his Ph.D. degree from Northwestern University in 1949. Following a year of post-doctoral studies, he joined the staff of Roosevelt University in Chicago, where he served as instructor and assistant professor of biology until 1954. In 1954 he joined the staff of the Health Physics Division of the Oak Ridge National Laboratory as a research ecologist. Under his direction, the ecological research program of the Health Physics Division was developed into one of the largest units in the world devoted to research in radiation ecology. A major emphasis of this group has been the study and use of radioisotopes,

especially fission product isotopes, as research tools for the study of ecological processes and for the study of ecosystems. Dr. Auerbach was Chief of the Radiation Ecology Section of the Health Physics Division for 10 years, Director of the Ecological Sciences Division for two years, and is now Director of the Environmental Sciences at Oak Ridge National Laboratory. He also was the President of the Ecological Society of America (1971-1972) and in addition, has been a member or chairman of a number of advisory committees in the National Academy of Sciences and in government agencies. Dr. Auerbach is a Fellow of the American Association for the Advancement of Science and is listed in Who's Who in America



Orie Loucks

Dr. Orie Loucks is Science Director of the Institute of Ecology, Indianapolis, Indiana. He received his B.Sc.F. and M.Sc.F. degrees in forestry from the University of Toronto. In 1960 he received a Ph.D. degree in botany from the University of Wisconsin-Madison. He joined the Department of Botany faculty at the University of Wisconsin in 1962. From 1969 to 1973, he headed an interdisciplinary study of the Lake Winnebago basin as part of the U.S. contribution to the International Biological Program. This program focused principally on land-water interactions and ecosystem cycling. From 1976 to 1978 he coordinated a large study of coal-fired power plants on the environment, particularly aquatic effects. He has published approximately 50 papers in the fields of Botany, Forestry, Limnology and Ecosystem Analysis.



Frank L. Parker

Dr. Frank L. Parker is Professor of Environmental and Water Resources Engineering at Vanderbilt University, Nashville, Tennessee. Dr. Parker received a B.S. degree in Civil Engineering from Massachusetts Institute of Technology in 1948. His M.S. degree in Civil Engineering was awarded by Harvard University in 1950. In 1955, Harvard University awarded him a Ph.D. in Water Resources. Dr. Parker served with a U.S. Army Combat Engineer Battalion from 1943-1946. A registered professional engineer in New York State, Dr. Parker belongs to the following professional societies: American Society of Civil Engineers, Health Physics Society, American Association for the Advancement of Science, Water Pollution Control Federation, American Geophysical Union and the American Nuclear Society. In 1961 Dr. Parker was a

consultant to the State of Israel on radioactive waste disposal problems. Dr. Parker has served as consultant to the Government of Pakistan on water problems in connection with the reactor. He was a visiting lecturer at Jesus College, Oxford, England in 1967. Here he presented an advanced course on Radioactive Waste Management for the International Atomic Energy Agency and the Government of the United Kingdom. Besides lecturing at various universities, Dr. Parker has written various scientific articles and has served as coeditor of different publications.

Honor Award

Lost Creek Quarry
Trail, Jackson County,
Oregon
Design by: Portland
District



Jurors Comments:

"Truly advanced approach to modifying the environment in a manner which enhances and creates interest an outstanding example of innovative application of classical surface mining techniques to enhance the human environment."

Six and one half million cubic yards of rock material was removed from a quarry site high above the abutment of the dam. Traditional removal techniques would have left a scar on the wooded hillside, visible from the lake and recreation areas. Excavation was designed to minimize the aesthetic impact and to make the excavation nearly unnoticeable from roads and public use areas. The manner of excavation was controlled as an undisturbed berm of soil and vegetation formed the forward edge of the quarry, providing a visual screen between the lake and the quarry. Planting soil was removed and set aside for later restoration use. Final quarry

configuration consists of a gently sloping floor for drainage and a planting ledge part way down the rear face of the quarry wall. The entire area was graded with planting soil, seeded to field grass, and planted with seedlings. Larger trees were planted on the berm. Several applications of fertilizer have been made to insure establishment and growth of plant material and grass. The abandoned quarry as now viewed from the lake and state park presents as pleasing view as is practicable, and as the plantings grow, the quarry should blend in with the surrounding countryside more closely.



Award of Merit

**Slow Infiltration Land
Treatment System
Deer Creek Lake, Ohio
Design by: Huntington
District**

The primary factors considered in the design were soil characteristics, the amount of wastewater to be treated and the aesthetic appearance of the installation. To insure optimum system performance, spray distribution and underdrain systems were designed. The water quality was monitored in the lagoon, applied wastewater and in the surface and percolate discharges. Crops that would not decrease the infiltration of water through the soil and yet would remove the nutrients were evaluated. A procedure was established for monitoring the impact of wastewater on crops and on the soils properties. Levels of nitrogen, phosphorus, suspended solids, and other chemicals in the effluent entering the lagoon, the applied wastewater and the percolate from the treatment site have been monitored for the past three years. These data show that

the treatment system has performed above design expectations, in that the percolate water quality meets drinking water standards. Phosphorus has been removed by the soil to undetectable levels. In no instance has there been an accumulation of toxic substance in the plant biomass, or any adverse effects on wildlife in the area.

Jurors Comments:

"Land application of wastewater is apparently a new activity of the Corps follow EPA's emphasis on complete treatment. Less expensive than the tertiary treatment that would otherwise be required fertilizes the disposal area as well."





Award of Merit

Camp Campfield Ecological Study Area
Lake Shelbyville,
Illinois
Design by: St. Louis
District

Jurors Comments:

Represents an innovative use of young people to create an ecological study area which not only enhances the local lake project, but provides unusual opportunities for developing and promoting environmental awareness, as well as an outdoor laboratory which enables the visiting public to learn and understand a variety of ecological principles.



During the summer of 1978, a 226 acre area was restored to its natural state by removing trash and fencing. A nature trail system, prairie grass plots, successional areas, group amphitheaters, observation blinds, and renovated group residence areas were then constructed. Renovation and rehabilitation activities began with the cleanup and repair of two government homes to be used as an Environmental Learning Center and residence facilities for organized groups conducting environmental programs. Additional work included the removal of over 2500 yards of barbed wire fencing, 180 cubic yards of trash from ravines, stabilized an erosion gully developing on the spill-

way of one study pond by hand placement of over 20 tons of riprap, and the development of a 2-1/2 mile nature trail system designed to blend with the natural features of the site. Design considerations included construction of erosional checks, steps and switch-backs, ten bridges, observation blinds, and an amphitheater. Also developed were a successional study site and prairie grass and forb plots totaling 10 acres. The Camp Campfield Ecological Study Area has enhanced the recreational-resource management objectives of the project by providing organized groups a specifically developed area to investigate nature and to enhance environmental awareness.





Award of Merit

O.C. Fisher Wildlife
Management Area
San Angelo, Tom Green
County, Texas
Design by: Fort Worth
District

Jurors Comments:

"Post rangeland management practices often have led to deterioration of range quality and the invasion of woody species such as mesquite. Management of wildlife areas also now has outgrown simplistic 'food patch' operations that introduce unnatural species, or over-stimulate a few game species. This project has taken a successful ecosystem approach to reestablishment of the native prairie and its wildlife, working in conjunction with local institutions in Texas.

The project required restoration of native prairie grasses to serve as a basis for multiple-use range management. Restoration of a prairie ecosystem was a major step in the plan for improved range management and wildlife. A series of unique agreements between the state, two universities, and the Corps put



4,645 acres of ranchland under a long-term lease for wildlife management, agricultural research and instruction, and recreational development. Initial brush control involved clearing 75 percent of the area in a carefully designed strip clearance plan. Mixed prairie grasses were planted, and they flourished. Water well development provides water for livestock and wildlife. Improved habitat management and controlled hunting produced a dramatic increase in the number and diversity of wildlife species. Completion of an all-weather access road provides new recreational opportunities. As a result of Corps actions, two major research centers were built on adjacent private lands to serve regional needs. This region is termed a natural laboratory for environmental studies.



Honorable Mention

Muddy Bayou Drainage
Project

Saline Wildlife Manage-
ment Area, Calahoula
Parish, Red River Back-
water Area, Louisiana

Design Supervised by:
Vicksburg District

Jurors Comments:

After loop levee was constructed to prevent farmland from flooding, it was found that ponding was occurring. Rather than lower the existing ditch 3 feet by conventional dragline methods, they used explosive excavation with practically no environmental damage and at lower cost. We applaud the use of this innovative technique."



Honorable Mention

**David Crabill House
Restoration
Clark County Historical
Society
Design Supervised by:
Louisville District**

Jurors Comments:

"We are pleased that the Corps has expanded its traditional role to include the total environment, and in this case, to restore the house which had originally stood on the spot. Restoration was nicely done,

and involved the enlistment of volunteer members of the Clark County Historical Society. However, note incomplete environmental mitigation along dam drainageway."



environmental

Honorable Mention

Sacramento River Bank
Protection Project
Butte, Colusa, Glenn,
Sacramento, Solano,
Sutter and Yolo
Counties, California
Design Supervised by:
Sacramento District

Jurors Comments:

"Previously standard practices for bank protection and berm construction often left an unnaturally bare river-edge environment. Innovations in using only a narrow strip for construction of the bank protection structures, revegetating the upper edge, and leaving woody vegetation between the river bank and levee, avoids the loss of river-edge habitat. Although some of these principles have been practiced at other locations, all have been brought together with great effectiveness in this project."



This EP supersedes EP 672-1-1 April 1978